

SIOP[®] LESSON PLAN

Date: October 2012

Grade/Class/Subject: kindergarten/Mrs. Jill E. Ledbetter/Science-Math

Unit/Theme: Measuring, Adding, Predicting

Standards:

K.MD.1 Describe measurable attributes of objects. Describe several measurable attributes of a single object.

K.MD.2 Directly compare two objects with a measureable attribute in common, to see which objects have more of/less of the attribute and describe the difference.

K.OA.5 Fluently add within 5.

Content Objective(s):

- Students will be able to recognize measuring with cups.
- Students will be able to predict (hypothesize) color changes.
- Students will be able to use mental math to find the sum of cups of liquids, and solve adding math equations using numbers 1-6.

Language Objective(s):

- Students will be able to analyze and evaluate measuring 1 cup, 2 cups and adding cups together.
- Students will be able to hypothesize what will happen when two colors are added to one another.
- Students will recognize the use of a recipe, and practice using a recipe.
- Students will be able to compare blending two liquids to make green, and also create green by spinning a zoomer.

Key Vocabulary: funnel, cup(s), measuring cups, liter, quart, liquid, predict, hypothesize, measure, poisonous, recipe, add, all-together, equal

Supplementary Materials:

Clear plastic measuring cups, yellow & blue food coloring, (3) empty clear plastic containers, funnel, chart paper, raisins, cereal. Dominos (if necessary). Precut cardboard circles, yellow and blue markers, string.

SIOP Features

Preparation

- ☒ Adaptation of Content
- ☒ Links to Background
- ☒ Links to Past Learning
- ☒ Strategies incorporated

Integration of Processes

- ☒ Reading
- ☒ Writing
- ☒ Speaking
- ☒ Listening

Scaffolding

- ☒ Modeling
- ☒ Guided practice
- ☒ Independent practice
- ☒ Comprehensible input

Application

- ☒ Hands-on
- ☒ Meaningful
- ☒ Linked to objectives
- ☒ Promotes engagement

Grouping Options



- ☒ Whole class
- ☒ Small groups
- ☐ Partners
- ☒ Independent

Assessment

- ☒ Individual
- ☒ Group
- ☒ Written
- ☒ Oral

Lesson Sequence:

(before lesson make the following on chart paper)

		Water
2 ~		cups yellow water
2 ~		cups blue water

Before lesson:

Select three clean, empty, clear plastic quart, liter, or larger containers. Fill two of the containers with three cups of water each, and leave the remaining container empty. Add blue food coloring to one container, and add yellow food coloring to the other. Hang the recipe chart paper where students can easily see while we do the lesson.

Have children gather in a half circle around sink/table at back of room. Discuss what a recipe is and why we use one. Brainstorm with students where you get recipes, where and why you use them. Read recipe for today's lesson aloud then have students read it with the teacher. Ask "What kind of cup would we use to measure the water for our recipe?" Show students measuring cup. Discuss what a measuring cup is, ask if anyone has one, has used one. Show the students where it says "one cup" on measuring cup. Read recipe aloud again and ask students what we should do next, choose a quiet student to help. Assist that student in using the funnel to pour one cup of the yellow colored water into the empty container. Ask students if that is enough...choose a different student to pour one more cup of

yellow water into container. Read recipe again, have students direct what/how much needs to be added to follow the recipe. BEFORE adding blue water have students guess/predict what will happen when the blue water is poured into the container. Explain hypothesis—an *educated guess*. Then have students guide teacher through adding 2 more cups. Ask students as we add the cups "How many cups of water are in the container now?" "Do we need to add any more water?" "Why?" Analyze what happened to the water...it turned GREEN. Now decide what to name the recipe....fill in title (GREEN) on chart paper recipe. Discuss what we should do with the water we just made, should we drink it? Explain to students that some juice is colored and is okay to drink when someone you know gives you something to drink. Explain other liquids, like cleaning agents, detergents, etc. are colored because they are poisonous. Explain to class they are NEVER EVER to drink a liquid that you don't know what it is, especially if you don't know where it came from, or a liquid that you 'found'.

[SCIENCE CENTER: Let students know that once they are done with their math assignments the next couple of days they will be able to measure cups of water and with funnels and containers measure and add water together. Students will do this activity at the sink, individually or with a partner.]

Have students return to their seats. Hand out Lesson Practice 77. Read recipe. Color the recipe as directions state. Turn paper over complete adding equations on back, domino adding. (Adaptation: For students who need reinforcement provide dominos to match and count dots like in assignment).

While students are completing work measure out 3 cups of cereal per table provide a large bowl of this cereal at each table to have. Provide a bowl of raisins for students to scoop one cup out at each table for them to add to their cereal.

Students will get to measure one cup each into a plastic baggie with their name on it as a snack.

Once all students at each table have completed their paper and its corrected have each table wash their hands then use measuring cups to make their bowl of cereal. Each student gets one cup of cereal in a baggie at tables for snack. Monitor measuring and assist students pour their cup of cereal into baggies to minimize mess!

DAY TWO~Reinforcing concepts & integrating writing:

The next day explain to students they will be given the opportunity to write the recipe in their journals that we created together in math using the water. Posting the recipe, the chart paper that was on display yesterday, students will copy/write the recipe in their journals. After explaining this to the students so they can work independently demonstrate the "ZOOMERS" we will be using today to reinforce that yellow + blue = green. Ask students to remember what happened yesterday when we combined the blue water with the yellow water. Show the student the cardboard circles and string they will use today to create a zoomer. Show students

the white zoomer and how it works. Ask student what they think will happen if we color half the circle yellow. Test their hypothesis. Ask students what they hypothesize will happen if we color the other half of the zoomer blue. Test their hypothesis by spinning after coloring each half yellow/blue. Help students, in small groups, to create a zoomer to take home (with half yellow and half blue colored on cardboard circles). The rest of the class is writing the recipe in their journal and drawing a picture of our science/math lesson from the previous day. Assist students with how to make their zoomer and teach them how to properly spin them so they 'zoom'.

Reflections: